TECHNICAL SUPPORT DOCUMENT

New Mexico's Standards For Interstate and Intrastate Surface Waters 20.6.4 NMAC

Amendments for Lakes in the Rio Grande, Pecos, Canadian, San Juan, Little Colorado and Gila River Basins

And

The Lower Dry Cimarron

U.S. EPA REGION 6
WATER QUALITY PROTECTION DIVISION
November 2012

Contents

I. Introduction

Background

As described in §303(c) of the Clean Water Act (CWA) and in the Standards Regulation at 40 CFR Part 131.20, states and authorized tribes have primary responsibility to develop and adopt water quality standards to protect their waters. State and tribal water quality standards consist of three primary components: beneficial uses, criteria to support those uses, and an antidegradation policy. In addition, CWA §303(c)(1) and 40 CFR 131.20 require states to hold public hearings at least once every three years to review and, as appropriate, modify and adopt standards. Under 40 CFR 131.21, EPA reviews new and revised surface water quality standards that have been adopted by states and authorized tribes. In Region 6, authority to approve or disapprove new and/or revised standards submitted to EPA for review has been delegated to the Water Quality Protection Division Director. State or tribal water quality standards are not considered effective under the CWA until approved by the Environmental Protection Agency (EPA)[1].

The purpose of this Technical Support Document (TSD) is to provide the basis for the Environmental Protection Agency's (EPA) action on new/revised standards for the Lower Dry Cimarron River, the Rio Grande, Pecos, Canadian, San Juan, Little Colorado and Gila River Basins in the *New Mexico Standards for Interstate and Intrastate Waters* (20.6.4 NMAC).

Chronology of Events

The Environmental Protection Agency (EPA) and the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) engaged in early discussions on proposals to amend the current designated uses for the Dry Cimarron River and establish stand alone segments for a number of lakes in the Rio Grande, Pecos, Canadian, San Juan, Little Colorado and Gila River basins. EPA provided comments on the development of supporting documents and proposals for modifications to use designations for the Dry Cimarron in the June - July 2010 timeframe.

NMED held a series of public hearings around the state to discuss its proposals related to the lower Dry Cimarron River on August 12, 2010 and August 24 and 30, 2011. Following these meetings, NMED released a discussion draft of the proposed amendments and opened a 30-day public comment period on August 10, 2011. NMED submitted a draft Use Attainability Analysis (UAA) for the Dry Cimarron River to EPA and requested technical approval. Following its review, EPA determined that the UAA was technically approvable to support proposed use modifications to the Dry Cimarron River on October 26, 2011.

NMED requested and was granted a hearing before the New Mexico Water Quality Control Commission (Commission) on November 16, 2011. The WQCC held this public

[1] "Alaska rule" [Federal Register: April 27, 2000 (Volume 65, Number 82)]

hearing and adopted NMED's proposed amendments on April 10, 2012. The state submitted these amendments by letter from Sarah Cottrell to William Honker dated July 12, 2012; however, the amended standards became effective as state law on July 10, 2012. This TSD documents EPA's review of the new/revised standards.

Summary of the Revised Standards

The Commission has established 19 new regulatory segments within six separate river basins and modified the designated aquatic life use applicable to the lower Dry Cimarron River:

Rio Grande Basin:

- 20.6.4.133 - Rio Grande Basin
- 20.6.4.134 - Rio Grande Basin and associated modifications to segments 20.6.4.108, 115 and 119
- 20.6.4.135 - Rio Grande Basin and associated modifications to segment 20.6.4.109

Pecos River Basin:

- 20.6.4.222 - Pecos River Basin and associated modifications to segment 20.6.4.217 - Pecos River Basin
- **2**0.6.4.223 - Pecos River Basin and associated modifications to segment 20.6.4.209 - Pecos River Basin
- 20.6.4.224 - Pecos River Basin
- 20.6.4.225 - Pecos River Basin and associated modifications to segment 20.6.4.211 - Pecos River Basin
- 20.6.4.226 - Pecos River Basin
- 20.6.4.227 - Pecos River Basin
- 20.6.4.228 - Pecos River Basin
- 20.6.4.229 - Pecos River Basin

Canadian River Basin:

- 20.6.4.313 - Canadian River Basin and associated modifications to segments 20.6.4.307 and 309 – Canadian River Basin
- 20.6.4.314 - Canadian River Basin
- 20.6.4.316 - Canadian River Basin
- 20.6.4.317 - Canadian River Basin

San Juan River Basin:

- 20.6.4.410 - San Juan River Basin- Jackson Lake.

Little Colorado River Basin:

- 20.6.4.453 - Little Colorado River Basin - Quemado Lake

Gila River Basin:

- 20.6.4.505 - Gila River Basin- Bill Evans Lake

Lower Dry Cimarron River:

- 20.6.4.702 – Lower Dry Cimarron River

EPA's review of these new/revised standards was for consistency with §303(c) of the Clean Water Act and 40 CFR 131 of the Standards Regulation.

II. New or Revised Provisions EPA is Approving

EPA has determined that the new or revised provisions in New Mexico's Water Quality Standards 20.6.4 NMAC described below or otherwise contained in this TSD are approved.

Lakes

The New Mexico standards apply to all waters of the state, including lakes. In the previously approved state standards, only a limited number of lakes are identified as classified waters in sections 20.6.4.101-899 NMAC. Within this structure, some lakes were specifically identified within a particular regulatory stream segment description while others were included in broad geographic groups but not specifically named. This approach to lakes is not unusual given the tendency for most state regulatory programs to focus on lotic waters. More recently, these waters may have been categorized as unclassified perennial waters under section 20.6.4.99 NMAC in the state's standards. Although intended to ensure CWA §101(a)(2) uses are being applied to unclassified perennial waters, the default uses and criteria applicable under section 20.6.4.99 NMAC are intended for lotic waters and not appropriate for lakes or reservoirs.

To address this, in developing recommendations for new segments, NMED/SWQB utilized new and existing data on the hydrologic, physical and biological characteristics to determine designated use support. In response, the Commission has

established unique segments within the appropriate river basin consistent with NMED/SWQB recommendations. In most instances the Commission adopted aquatic life uses and supporting criteria that are as, or more, protective than those that previously applied to these waters. EPA considers the state's focus on classifying lakes into distinct regulatory segments and applying appropriate criteria as consistent with both 40 CFR 130.10(a) and (b).

These amendments established 19 new classified regulatory segments for 62 lakes that were previously either classified within an existing stream segment or were unclassified. These lakes are located in six different river basins: the Rio Grande, Pecos, Canadian, Gila, San Juan and Little Colorado basins. These include both natural and man-made reservoirs. The new segments in the Rio Grande Basin will cover 23 lakes, most of which are above 11,000 feet in elevation. New segments in the Pecos River Basin will cover eight lakes, all at over 10,000 feet in elevation. Those in the Canadian River Basin are above 5,000 feet in elevation and encompass five lakes. These amendments also establish new segments for lower elevation lakes in these same basins as well as the San Juan, Little Colorado and Gila River basins.

Rio Grande Basin:

20.6.4.133 - Rio Grande Basin

This segment was established for 23 high-elevation natural lakes in the Rio Grande Basin. These lakes are located in the Sangre de Cristo Mountains of northern New Mexico and are open to the public but most are only accessible by foot or horseback and are minimally impacted by human activities. They include:

Bull Creek Lake
Cow Lake
Elk Lake
Goose Lake
Heart Lake
Hidden Lake (Lake Hazel),
Horseshoe Lake
Horseshoe (Alamitos) Lake
Jose Vigil Lake
Lost Lake
Middle Fork Lake
Nambe Lake
Nat Lake II
Nat Lake IV
No Fish Lake
Pioneer Lake
San Leonardo Lake
Santa Fe Lake
Serpent Lake
South Fork Lake
Trampas Lakes (east)
Trampas Lakes (west)
Williams Lake

Some of these lakes are in congressionally designated wilderness areas and most have been designated by the Commission as Outstanding National Resource Waters (ONRWs) with the exception of Cow, Goose, Middle Fork, Nat II and Pioneer Lakes.

These lakes were either classified perennial waters in segments 20.6.4.121 or 123, or were unclassified perennial waters covered under section 20.6.4.99 NMAC.

Descriptions for segments 20.6.4.121 and 123 did not need to be amended because they specifically exclude waters that are "included in other segments.

The designated uses that apply to these lakes include high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat. These uses have been carried over from segment 20.6.4.121 or 123. The high quality coldwater aquatic life use includes a segment-specific criterion of 300 µS/cm, or less, for specific conductance. To protect human health, segment-specific criteria for E. coli bacteria with a monthly geometric mean of 126 cfu/100 mL and single sample maximum of 235 cfu/100 mL has also been carried over for those waters originally covered by segments 20.6.4.121 or 123. These criteria are more protective than what applied for those waters coved under section 20.6.4.99 NMAC. Other applicable numeric criteria are outlined in 20.6.4.900 NMAC.

20.6.4.134 - Rio Grande Basin

This segment was established for nine small reservoirs that were contained in other classified segments but not specifically named in those segments. They include:

Cabresto Lake
Canjilon Lake "a"
Canjilon Lake "c"
Canjilon Lake "e"
Canjilon Lake "f'
San Gregorio Lake
Hopewell Lake
Fawn Lake (east)
Fawn Lake (west)

The Commission adopted modifications excluding San Gregorio Lake from segment 20.6.4.108, Hopewell Lake from 20.6.4.115 and the Canjilon Lakes from segment 20.6.4.119. Although some waters were drawn from segment 20.6.4.123, the description for that segment was not amended because it does not specifically name waters, only referring to waters that are "included in other segments."

All nine reservoirs are located in the Carson National Forest in the Jemez and Sangre de Cristo mountains and are situated at or above 9000 feet in elevation. San Gregorio Lake, the largest reservoir in this new segment is designated as an ONRW. The Commission carried over the high quality coldwater aquatic life use from segment 20.6.4.115 and the segment-specific 300 µS/cm, or less, criterion for specific conductance specific to that use. This criterion is more protective than for those lakes drawn from segments 20.6.4.108, 119 and 123.

Since these lakes are located on Forest Service land and are easily accessible to the public for recreation, the Commission also retained the primary contact use and the associated segment-specific criteria for E. coli bacteria with a monthly geometric mean of 126 cfu/100 mL, or less, and a single sample maximum of 235 cfu/100 mL, or less. The Commission also retained domestic water supply, irrigation, livestock watering and wildlife habitat as designated uses, consistent with segment 20.6.4.115. The applicable numeric criteria for these uses are found in 20.6.4.900 NMAC.

20.6.4.135 - Rio Grande Basin

This new segment was established for Bluewater Lake. Bluewater Lake was classified under, but not specifically named in, segment 20.6.4.109. The Commission modified the description to specifically exclude this lake.

Bluewater Lake is a reservoir built as an irrigation supply at an elevation of over 7000 feet and sits in Bluewater Lake State Park. The Commission has retained all designated uses that were applicable to this lake under segment 20.6.4.109 with the exception of the fish culture use. This use is not an existing use in this new segment since the fish hatchery is actually on the Rio Cebolla in segment 20.6.4.109 and not Bluewater Lake itself. Other applicable uses are coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat. The applicable numeric criteria in 20.6.4.900 NMAC apply with the exception of segment-specific criteria for phosphorus of 0.1 mg/L or less. Criteria for E. coli bacteria at a geometric mean of 126 cfu/mL, or less, and a single sample maximum of 235 cfu/100 mL, or less, to protect human health has been carried over from segment 20.6.4.109.

Pecos River Basin:

20.6.4.222 - Pecos River Basin

The Commission established this segment for eight relatively small high-elevation natural lakes, above 10,000 feet in the Pecos River Basin. All are in the Pecos wilderness and have been designated as ONRWs. These lakes were considered by the state to either be in segment 20.6.4.217 or covered under section 20.6.4.99 NMAC but were not specifically named in that regulatory segment or category. In establishing this segment, the Commission made corresponding modifications to segment 20.6.4.217 specifically excluding these lakes. They include:

Johnson Lake	Spirit Lake
Lake Katharine	Stewart Lake
Lost Bear Lake	Truchas Lake (north/upper)
Pecos Baldy Lake	Truchas Lake (south/lower)

The Commission has carried over the designated uses and criteria that are applicable to segment 20.6.4.217, with the exception of fish culture. Since there are no fish hatcheries in this new segment, the fish culture use is not an existing use and can be excluded. These designated uses are coldwater aquatic life, domestic water supply, irrigation, primary contact, livestock watering and wildlife habitat. The numeric criteria in 20.6.4.900 NMAC apply except for a segment-specific criterion of 300 µS/cm, or less, or specific conductance associated with the coldwater aquatic life use. In addition, the segment-specific criterion for E. coli bacteria with monthly geometric mean of 126 cfu/100 mL, or less, with single sample of 235 cfu/100 mL, or less, has been carried over to protect human health.

20.6.4.223 - Pecos River Basin

The Commission has established segment 20.6.4.223 for Bonito Lake. Bonito Lake is adjacent to the Lincoln National Forest and was created by impounding the Rio Bonito. Bonito Lake was previously classified but not specifically named in segment 20.6.4.209. In creating this segment, the Commission has made a corresponding amendment to exclude Bonito Lake from segment 20.6.4.209.

The Commission has retained the designated uses for Bonito Lake that applied when it was included in segment 20.6.4.209. These include coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering, wildlife habitat and public water supply. As with the previous segment, the numeric criteria in 20.6.4.900 NMAC apply, except for segment-specific of a 300 µS/cm, or less, criterion for specific conductance associated with the coldwater aquatic life use. Segment-specific criteria for E. coli bacteria with a monthly geometric mean of 126 cfu/100 mL, , or less, , and a single sample of 235 cfu/100 mL , , or less, , has also been carried over from segment 20.6.4.209.

20.6.4.224 - Pecos River Basin

The Commission established a new segment 20.6.4.224 for Monastery Lake. This lake is an off-channel impoundment which lies near the village of Pecos. This lake was previously included as an unclassified perennial water in section 20.6.4.99 NMAC.

Waters categorized under section 20.6.4.99 are designated for warmwater aquatic life, livestock watering, wildlife habitat and primary contact recreation. In creating this new segment, the Commission modified the aquatic life use from warmwater to coolwater consistent with assessments showing that temperatures supporting the 29ºC criterion can be met. In addition, primary contact, livestock watering and wildlife habitat uses were carried over from section 20.6.4.99 NMAC. Numeric criteria in 20.6.4.900 NMAC apply with the exception of segment-specific criteria for E. coli bacteria with a monthly geometric mean of 206 cfu/100 mL, or less, and a single sample 940 cfu/100 mL, or less, reflecting a low frequency of use. The bacteria criteria were carried over from section 20.6.4.99 and are appropriate since swimming, boating and camping are not allowed in this lake.

20.6.4.225 - Pecos River Basin

The Commission established segment 20.6.4.225 specifically for the Santa Rosa Reservoir, excluding it from segment 20.6.4.211 which was established prior to the construction of the reservoir.

The Santa Rosa Reservoir was originally constructed to provide flood control, irrigation storage and sediment control. Based on field assessments, at just over 4700 feet, the Santa Rosa Reservoir can support the coolwater aquatic life designated use and

associated 29º C criterion. In addition, irrigation, primary contact, livestock watering and wildlife habitat uses are attainable and have been adopted. The use-specific criteria described in 20.6.4.900 NMAC apply in this segment. However, the fish culture designated use that previously applied to Santa Rosa Reservoir as part of segment 20.6.4.211 is not appropriate and would not be considered an existing use since there is no fish hatchery in the Santa Rosa Reservoir. Similarly, EPA agrees that the flow-based TDS, sulfate and chloride criteria that applied at all flows above 50 cfs in the original segment are not appropriate for lakes and reservoirs and have been excluded from the new segment.

20.6.4.226 - Pecos River Basin

Segment 20.6.4.226 was established by the Commission for Perch Lake. Perch Lake is small spring fed natural sinkhole lake. The lake was an unclassified water previously covered under section 20.6.4.99 NMAC.

In establishing this segment, the Commission changed the default aquatic life use from warmwater that applied under section 20.6.4.99 NMAC to coolwater aquatic life. Measured summer temperatures indicate that the coolwater criterion of 29ºC can be met. The segment will retain the default primary contact, livestock watering and wildlife habitat uses that applied under section 20.6.4.99 NMAC. However, since the lake has a high frequency of primary contact use, a more protective segment-specific criteria with a monthly geometric mean for E. coli bacteria of 126 cfu/100 mL and single sample 235 cfu/100 mL, or less, will apply. Other numeric criteria found in 20.6.4.900 NMAC continue to apply in this segment.

20.6.4.227 - Pecos River Basin

Segment 20.6.4.227 was established for Lea Lake, which is a spring fed sinkhole lake located in Bottomless Lakes State Park. Lea Lake was an unclassified perennial water covered under section 20.6.4.99 NMAC.

The Commission has retained the warmwater aquatic life use as well as the primary contact and wildlife habitat uses that previously applied under section 20.6.4.99 NMAC. The Commission retained the default primary contact and wildlife habitat uses that applied under section 20.6.4.99 NMAC. Reported summer temperatures in the lake are consistent with the warmwater criterion of 32.2°C. High salinity levels prevent the support of a recreational fishery but does provide habitat for the Pecos pupfish and non-native rainwater killifish. The Commission has adopted a more protective segment-specific criteria for E. coli with a monthly geometric mean bacteria 126 cfu/100 mL and single sample 235 cfu/100 mL, or less, will apply.

High salinity levels prevent attainment of the livestock watering use. Although New Mexico has not established salinity standards for specific designated uses, these waters, with high total dissolved solids (TDS) concentrations and equivalent high specific conductance, would adversely affect livestock. Because of these naturally high salt

concentrations, livestock have not been allowed in the Bottomless Lake State Park since the 1930's. Since the livestock watering use has not been an existing use in this portion of the Pecos, EPA agrees that the use should not be carried over from section 20.6.4.99 NMAC. The numeric criteria found in 20.6.4.900 NMAC also continue to apply in this segment.

20.6.4.228 - Pecos River Basin

The Commission established segment 20.6.4.228 for Cottonwood Lake and Devil's Inkwell, both of which are small sinkhole lakes in Bottomless Lakes State Park. Both lakes were previously unclassified waters under section 20.6.4.99 NMAC.

The Commission has adopted the coolwater aquatic life use for both lakes. Temperatures in these lakes are consistent with the associated 29ºC criterion. Primary contact and wildlife habitat designated uses also apply. Although the primary contact use can be attained, swimming is not allowed in either of these lakes. As a result, segment-specific criteria with a monthly geometric mean for E. coli bacteria of 206 cfu/100 mL, or less, and a single sample 940 cfu/100 mL, or less, were carried over from section 20.6.4.99 NMAC, reflecting a low frequency of use. As with the previous segment, TDS levels are not appropriate for livestock and given the prohibition of livestock in Bottomless Lake State Park, the livestock watering use is not an existing use in this new segment of the Pecos and can be removed. In addition, numeric criteria in 20.6.4.900 NMAC apply.

20.6.4.229 - Pecos River Basin

As with the previous segments, the Commission has also established segment 20.6.4.229 for Mirror Lake which is also located in Bottomless Lakes State Park. Mirror Lake was previously unclassified and was covered under section 20.6.4.99 NMAC.

The Commission has retained the warmwater aquatic life, primary contact and wildlife habitat designated uses that applied under section 20.6.4.99. Assessments indicate that temperatures in this Mirror Lake are consistent with the warmwater criterion of 32.2ºC. Mirror Lake can support the threatened Pecos pupfish, but natural salinity is too high to support a traditional recreational fishery. Although Mirror Lake can support primary contact, swimming is not allowed in this lake. Segment-specific criteria for E. coli apply at a monthly geometric mean of 206 cfu/100 mL, or less, and a single sample 940 cfu/100 mL, or less, reflecting the low frequency of use has been carried over from section 20.6.4.99 NMAC. As described in segment 20.6.4.227 and 228, salinity levels prevent livestock watering and the use is not allowed in waters in Bottomless Lake State Park. EPA agrees that livestock watering is not an existing use and can be removed. Other numeric criteria in 20.6.4.900 NMAC apply.

Canadian River Basin:

20.6.4.313 - Canadian River Basin

This segment was created for five high-elevation natural lakes in the Canadian River Basin. These lakes were either classified within other perennial segments (20.6.4.307 or 20.6.4.309) or unclassified perennial waters covered under section 20.6.4.99. In addition to establishing this segment, the Commission has amended segments 20.6.4.307 and 20.6.4.309 to exclude the lakes that are now included in this segment. This new segment includes:

Encantada Lake
North Fork Lake of Rio de la Casa
Middle Fork Lake of Rio de la Casa
Maestas Lake
Pacheco Lake

The North Fork Lake of Rio de la Casa and the Middle Fork Lake of Rio de la Casa are in the Pecos wilderness and are designated as ONRWs.

The Commission has retained the designated uses from segment 20.6.4.309 for coldwater aquatic life, domestic water supply, irrigation, primary contact, livestock watering and wildlife habitat. The Commission has adopted a more protective segment-specific 300 μS/cm criterion for specific conductance associated with the coldwater aquatic life use. The segment-specific criteria for E. coli bacteria with a monthly geometric mean of 126 cfu/100 mL, or less, with a single sample of 235 cfu/100 mL, or less, has been carried over from segment 20.6.4.309. The applicable numeric criteria found in 20.6.4.900 NMAC also apply to this segment.

20.6.4.314 - Canadian River Basin

The Commission established segment 20.6.4.314 to include north and south Shuree Ponds. These reservoirs were previously classified, but not specifically named, in segment 20.6.4.309. Accordingly, the Commission has amended segment 20.6.4.309 to exclude North and South Shuree Ponds.

These lakes are located within Carson National Forest and are designated as ONRWs. The Commission has retained the designated uses and specific criteria that were applicable under segment 20.6.4.309. These include high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, and livestock watering and wildlife habitat. Although the high quality coldwater aquatic life use has been carried over, the specific conductance criterion of 300 μS/cm cannot be attained because of natural salinity, requiring a segment-specific limit of 500 μS/cm. The primary contact use and segment-specific E. coli criteria have been carried over from segment 20.6.4.309 as well. The numeric criteria in 20.6.4.900 NMAC apply otherwise.

20.6.4.315 – Canadian River Basin

The Commission established segment 20.6.4.315 for Eagle Nest Lake. This lake was previously classified in segment 20.6.4.309. Accordingly, the Commission has amended segment 20.6.4.309 to exclude Eagle Nest Lake.

This segment is located in Eagle Nest Lake State Park and is designated as a public water supply for the Springer public water system. Eagle Nest Lake supports a resident coldwater fishery including trout and salmon and will retain the high quality coldwater aquatic life use designation from segment 20.6.4.309. Irrigation, domestic water supply, primary contact, livestock watering, wildlife habitat and public water supply designated uses that applied under segment 20.6.4.309 are also retained.

Numeric criteria are specified in 20.6.4.900 NMAC apply with the exception of segment-specific criteria for specific conductance and bacteria. Prior assessment data indicate that Eagle Nest Lake can meet all criteria associated with the high quality coldwater use with the exception of the 300 µS/cm conductivity criterion, but can support a segment-specific criterion of 500 µS/cm. Segment-specific criteria for E. coli bacteria at monthly geometric mean for at 126 cfu/100 mL, or less, and a single sample 235 cfu/100 mL, or less, to protect public health has been carried over from segment 20.6.4.309.

20.6.4.316 - Canadian River Basin

The Commission has established segment 20.6.4.316 for Clayton Lake. The segment was previously an unclassified perennial water under section 20.6.4.99 NMAC.

In establishing this segment, the Commission has changed the aquatic life use applicable under 20.6.4.99 NMAC from warmwater to coolwater. Assessment data indicates that water temperatures are consistent with the coolwater criterion of 29ºC. This segment was created as habitat for migratory waterfowl and is recognized by the National Audubon Society as an Important Bird Area. Although this segment retains a primary contact designation, a segment-specific geometric mean for E. coli of 206 cfu/100 mL, or less, and single sample 940 cfu/100 mL, or less, associated with a low-frequency of use has been carried over from section 20.6.4.99 NMAC. The criteria are appropriate given that the lake is primarily a waterfowl habitat. The numeric criteria outlined in 20.6.4.900 NMAC apply otherwise.

20.6.4.317 - Canadian River Basin

The Commission established segment 20.6.4.317 for Springer Lake. Springer Lake was previously covered as an unclassified perennial water under section 20.6.4.99 NMAC.

The Commission revised the aquatic life use from the default warmwater use associated with section 20.6.4.99 NMAC to the coolwater designated use. SWQB assessments indicate that the lake supports a variety of coolwater fish species and can meet the associated 29ºC criterion. The Commission has carried over the primary contact use from section 20.6.4.99 NMAC but has applied the more protective default E. coli criteria with a monthly geometric mean 126 cfu/100 mL, or less, and a single sample 410 cfu/100 mL, or less, specified in section 20.6.4.900 D. NMAC. The Commission has also added the irrigation use to this segment since Springer Lake was originally created to

provide water to farms and ranchers in the basin and therefore is an existing use. The livestock watering and wildlife habitat designated uses also apply and the associated criteria outlined in 20.6.4.900 NMAC.

San Juan River Basin:

20.6.4.410 - San Juan River Basin

The Commission established segment 20.6.4.410 for Jackson Lake, which was previously covered as an unclassified perennial water under section 20.6.4.99 NMAC.

In adopting this segment, the Commission has changed the default warmwater aquatic life use applicable under section 20.6.4.99 NMAC to the coolwater use. This lake is over 5000 feet in elevation and assessment data have shown that the reservoir can meet the coolwater temperature criterion of 29ºC. Other designated uses carried over include primary contact, livestock watering and wildlife habitat. The associated numeric criteria found in 20.6.4.900 NMAC apply with the exception of segment-specific criteria for E. coli with a monthly geometric mean of 206 cfu/100 mL, or less, and a single sample 940 cfu/100 mL, or less, carried over from section 20.6.4.99 NMAC. This value reflects a low frequency of use since swimming is not allowed in this lake.

Little Colorado River Basin:

20.6.4.453 - Little Colorado River Basin

The Commission adopted segment 20.6.4.453 as a new segment for Quemado Lake. This lake was previously an unclassified perennial water under section 20.6.4.99 NMAC.

The Commission has modified the aquatic life use from the default warmwater use applicable under section 20.6.4.99 NMAC to the coolwater use. Assessment data indicate that this lake can support the 29ºC coolwater criterion. Other designated uses are primary contact, livestock watering and wildlife habitat. The Commission has increased the level of human health protection by adopting criteria for E. coli with a monthly geometric mean of 206 cfu/100 mL, or less, and a single sample 410 cfu/100 mL, or less. The default criteria identified in section 20.6.4.900 NMAC associated with the livestock watering and wildlife habitat uses apply.

Gila River Basin:

20.6.4.505 - Gila River Basin

The Commission has adopted segment 20.6.4.505 for Bill Evans Lake. This lake was previously unclassified under section 20.6.4.99 NMAC.

Bill Evans Lake was originally created to provide water for the Phelps Dodge Mining Company's Tyrone copper refining facility and is supplied by water pumped from the Gila River. Previously, this lake was categorized under section 20.6.4.99 NMAC and the associated default warmwater aquatic life use. Initial assessments suggested that this lake could support a marginal coldwater aquatic life use based on the presence of seasonally stocked trout. However, actual measured temperatures indicate that this lake just exceeds the marginal coldwater criterion of 25ºC. Data indicated that the lake can support the 29ºC criterion associated with the coolwater fishery use. The Commission has also adopted more protective default criteria for E. coli with a monthly geometric mean of 206 cfu/100 mL, or less, and a single sample 410 cfu/100 mL, or less, found in section 20.6.4.900 D. NMAC. The default criteria identified in section 20.6.4.900 NMAC associated with the livestock watering and wildlife habitat uses also apply.

Lower Dry Cimarron River

20.6.4.702 - Lower Dry Cimarron River

During New Mexico's 2005 triennial revisions, the Commission separated the upper and lower portions of the Dry Cimarron, creating Segment 20.6.4.702 for the lower Dry Cimarron including Long Canyon and Carrizozo Creek. In establishing this segment, the Commission revised the aquatic life use from coldwater to warmwater with an associated 32.2°C temperature criterion. However, EPA was not able to approve these revisions because they were not supported by a use attainability analysis (UAA) as required by 40 CFR 131.10(j)(2). As a result of EPA's decision, the Commission reverted to the coldwater designated use and a 25°C temperature criterion with the expectation that a UAA would be developed to determine the appropriate uses for the lower Dry Cimarron in its 2010 triennial revisions.

The SWQB has since completed a UAA, which was submitted as a draft UAA to EPA for review and technical approval. Based on EPA's review of the draft UAA the modifications were technically approvable on October 27, 2011. The final was submitted in support of these amendments establishing segment 20.6.4.702 for the lower Dry Cimarron River.

The physical description of the lower Dry Cimarron is an important aspect of the UAA because this regulatory segment is physically long, extending approximately 130 miles in length. The segment descends from 6,000 feet to 4,300 feet to the eastern New Mexico border. In establishing uses appropriate for the lower Dry Cimarron, the SWQB divided this segment into the four separate assessment units (AU). Dividing physically long regulatory segments into multiple AUs is a concern for EPA, particularly in segments with variable topography, geology and particularly hydrology. What may be attainable in an AU at the upper end of a physically long high elevation regulatory segment may or may not be attainable in a distant lower elevation AU even though they may be contained in the same ecoregion or subecoregion. Significant variability between AUs would indicate the need for separate regulatory segments. This potential means that

the SWQB must be able to show that the attainable uses and criteria would be protective across all AUs in a single regulatory segment to gain EPA approval.

The state's BISON-M database (NMDGF 2002) indicates that none of the nine native fish species indigenous to the Dry Cimarron are considered coldwater species. The SWQB collected five native species, only two of which have thermal tolerances between warm and coldwater temperature ranges. The UAA described both Level III and Level IV Ecoregions for the lower Dry Cimarron, which show that the river lies primarily in woodland and grasslands. The lower Dry Cimarron experiences maximum daily mean temperatures in the middle to upper 80s°F (30°C) range. Based on its Air-Water Temperature Correlation (NMED/SWQB 2011), water temperature statistics indicate that the coldwater 20°C 6T3 criterion and 24°C maximum criterion for coldwater are not achievable in this segment. The correlation indicates that the attainable maximum temperatures are in the range of 28-30°C which are consistent with the coolwater aquatic life temperature criterion of 29°C (84°F), but significantly higher than the coldwater criterion of 25°C (77°F). Further, modeling of stream shading, width-to-depth ratio and flow also support the coolwater use designation. .

EPA also considered the effect that approving these amendments would have on downstream waters in Oklahoma. EPA believes that the coolwater aquatic life and primary contact use and associated criteria would be protective of the downstream waters of the Cimarron in Oklahoma.

V. Literature Cited

The Clean Water Act (CWA) 33 U.S.C. §1251 et seq. (1972)

U.S. Environmental Protection Agency (EPA). 2000. Water Quality Standards Regulation, Final Rule, Federal Register: (Volume 65, Number 82).

NMDGF. 2002. New Mexico Department of Game and Fish. BISON-M database.

Hopkins 2000. Water Quality Assessment of the Dry Cimarron River. New Mexico Environment Department.

NMED/SWQB. 2011. Air-Water Temperature Correlation. New Mexico Environment Department/Surface Water Quality Bureau.

ATTACHMENT A

20.6.4 NMAC Amended Sections

Amendment to 20.6.4 NMAC, Sections 108, 109, 115, 119, 133-135, 209, 211, 217, 222-229, 307, 309, 313-317, 410, 453, 505 and 702.

20.6.4.108 RIO GRANDE BASIN - Perennial reaches of the Jemez river and all its tributaries above Soda dam near the town of Jemez Springs, except San Gregorio lake and Sulphur creek above its confluence with Redondo creek, and perennial reaches of the Guadalupe river and all its tributaries.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm , or less, (800 µS/cm , or less, on Sulphur creek); the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, ; and pH within the range of 2.0 to 8.8 on Sulphur creek.

[20.6.4.108 NMAC - Rp 20 NMAC 6.1.2106, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[**NOTE:** The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.124 NMAC. The standards for San Gregorio lake are in 20.6.4.134 NMAC, effective 07-10-12]

20.6.4.109 RIO GRANDE BASIN - Perennial reaches of Bluewater creek excluding Bluewater lake and waters on tribal lands, Rio Moquino upstream of Laguna pueblo, Seboyeta creek, Rio Paguate upstream of Laguna pueblo, the Rio Puerco upstream of the northern boundary of Cuba, and all other perennial reaches of tributaries to the Rio Puerco, including the Rio San Jose in Cibola county from the USGS gaging station at Correo upstream to Horace springs excluding waters on tribal lands.

A. Designated Uses: coldwater aquatic life, domestic water supply, fish culture, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on La Jara creek.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: phosphorus (unfiltered sample) 0.1 mg/L , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .

[20.6.4.109 NMAC - Rp 20 NMAC 6.1.2107, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[**NOTE:** The standards for Bluewater lake are in 20.6.4.135 NMAC, effective 07-10-12]

20.6.4.115 RIO GRANDE BASIN - The perennial reaches of Rio Vallecitos and its tributaries except Hopewell lake, and perennial reaches of Rio del Oso and perennial reaches of El Rito creek above the town of El Rito.

A. Designated Uses: domestic water supply, irrigation, high quality coldwater aquatic life, livestock watering, wildlife habitat and primary contact; public water supply on the Rio Vallecitos and El Rito creek.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .

[20.6.4.115 NMAC - Rp 20 NMAC 6.1.2112, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[**NOTE:** The standards for Hopewell lake are in 20.6.4.134 NMAC, effective 07-10-12]

20.6.4.119 RIO GRANDE BASIN - All perennial reaches of tributaries to the Rio Chama above Abiquiu dam, except Canjilon lakes a, c, e and f and the Rio Gallina and Rio Puerco de Chama

north of state highway 96 and excluding waters on Jicarilla Apache reservation, and the main stem of the Rio Chama from the headwaters of El Vado reservoir upstream to the New Mexico-Colorado line. Some Cañones creek and Rio Chama waters in this segment are under the joint jurisdiction of the state and the Jicarilla Apache tribe.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the Rio Brazos and Rio Chama.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 500 µS/cm , or less, (1,000 µS , or less, for Coyote creek); the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .

[20.6.4.119 NMAC - Rp 20 NMAC 6.1.2116, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[**NOTE:** The standards for Canjilon lakes a, c, e and f are in 20.6.4.134 NMAC, effective 07-10-12]

20.6.4.133 RIO GRANDE BASIN - Bull Creek lake, Cow lake, Elk lake, Goose lake, Heart lake, Hidden lake (Lake Hazel), Horseshoe lake, Horseshoe (Alamitos) lake, Jose Vigil lake, Lost lake, Middle Fork lake, Nambe lake, Nat II lake, Nat IV lake, No Fish lake, Pioneer lake, San Leonardo lake, Santa Fe lake, Serpent lake, South Fork lake, Trampas lakes (east and west) and Williams lake.

A. Designated Uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .

[20.6.4.133 NMAC - N, 07-10-12]

20.6.4.134 RIO GRANDE BASIN - Cabresto lake, Canjilon lakes a, c, e and f, Fawn lakes (east and west), Hopewell lake and San Gregorio lake.

A. Designated Uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .

[20.6.4.134 NMAC - N, 07-10-12]

20.6.4.135 RIO GRANDE BASIN - Bluewater lake.

A. Designated Uses: coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: phosphorus (unfiltered sample) 0.1 mg/L , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .

[20.6.4.135 NMAC - N, 07-10-12]

[~~20.6.4.133~~] 20.6.4.136 - 20.6.4.200: [RESERVED]

20.6.4.209 PECOS RIVER BASIN - Perennial reaches of Eagle creek upstream of Alto dam to the Mescalero Apache boundary, perennial reaches of the Rio Bonito and its tributaries upstream of state highway 48 (near Angus) excluding Bonito lake, and perennial reaches of the Rio Ruidoso and its tributaries upstream of the U.S. highway 70 bridge near Seeping Springs lakes, above and below the Mescalero Apache boundary.

A. Designated Uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 600 µS/cm , or less, in Eagle creek, 1,100 µS/cm , or less, in Bonito creek and 1,500 µS/cm , or less, in the Rio Ruidoso; phosphorus (unfiltered sample) less than 0.1 mg/L; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .
[20.6.4.209 NMAC - Rp 20 NMAC 6.1.2209, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]
[**NOTE:** The standards for Bonito lake are in 20.6.4.223 NMAC, effective 07-10-12]

20.6.4.211 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Tecolote creek excluding Santa Rosa reservoir.

A. Designated Uses: fish culture, irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 3,000 mg/L , or less, , sulfate 2,000 mg/L , or less, and chloride 400 mg/L , or less, .
[20.6.4.211 NMAC - Rp 20 NMAC 6.1.2211, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]
[**NOTE:** The standards for Santa Rosa reservoir are in 20.6.4.225 NMAC, effective 07-10-12]

20.6.4.217 PECOS RIVER BASIN - Perennial reaches of Cow creek and all perennial reaches of its tributaries and the main stem of the Pecos river from Cañon de Manzanita upstream to its headwaters, including perennial reaches of all tributaries thereto except lakes identified in 20.6.4.222 NMAC.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the main stem of the Pecos river.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .
[20.6.4.217 NMAC - Rp 20 NMAC 6.1.2214, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]
[**NOTE:** The segment covered by this section was divided effective 05-23-05. The standards for the additional segments are under 20.6.4.220 and 20.6.4.221 NMAC.]

20.6.4.222 PECOS RIVER BASIN - Johnson lake, Katherine lake, Lost Bear lake, Pecos Baldy lake, Spirit lake, Stewart lake and Truchas lakes (north and south).

A. Designated Uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .
[20.6.4.222 NMAC - N, 07-10-12]

20.6.4.223 PECOS RIVER BASIN - Bonito lake.

A. Designated Uses: high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering, wildlife habitat and public water supply.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 1100 µS/cm , or less, ; phosphorus (unfiltered sample) less than 0.1 mg/L; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .
[20.6.4.223 NMAC - N, 07-10-12]

20.6.4.224 PECOS RIVER BASIN - Monastery lake.

A. Designated Uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL , or less, , single sample 940 cfu/100 mL , or less, .
[20.6.4.224 NMAC - N, 07-10-12]

20.6.4.225 PECOS RIVER BASIN - Santa Rosa reservoir.

A. Designated Uses: coolwater aquatic life, irrigation, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.225 NMAC - N, 07-10-12]

20.6.4.226 PECOS RIVER BASIN - Perch lake.

A. Designated Uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .
[20.6.4.226 NMAC - N, 07-10-12]

20.6.4.227 PECOS RIVER BASIN - Lea lake.

A. Designated Uses: warmwater aquatic life, primary contact and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .
[20.6.4.227 NMAC - N, 07-10-12]

20.6.4.228 PECOS RIVER BASIN - Cottonwood lake and Devil's Inkwell.

A. Designated Uses: coolwater aquatic life, primary contact and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL , or less, , single sample 940 cfu/100 mL , or less, .
[20.6.4.228 NMAC - N, 07-10-12]

20.6.4.229 PECOS RIVER BASIN - Mirror lake.

A. Designated Uses: warmwater aquatic life, primary contact and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL , or less, , single sample 940 cfu/100 mL , or less, .
[20.6.4.229 NMAC - N, 07-10-12]

[~~20.6.4.222~~] 20.6.4.230 - 20.6.4.300: [RESERVED]

20.6.4.307 CANADIAN RIVER BASIN - Perennial reaches of the Mora river from the USGS gaging station near Shoemaker upstream to the state highway 434 bridge in Mora, all perennial reaches of tributaries to the Mora river downstream from the USGS gaging station at La Cueva in San Miguel and Mora counties except lakes identified in 20.6.4.313 NMAC, perennial reaches of Ocate creek and its tributaries downstream of Ocate, and perennial reaches of Rayado creek downstream of Miami lake diversion in Colfax county.

A. Designated Uses: marginal coldwater aquatic life, warmwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.307 NMAC - Rp 20 NMAC 6.1.2305.3, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

20.6.4.309 CANADIAN RIVER BASIN - The Mora river and perennial reaches of its tributaries upstream from the state highway 434 bridge in Mora <u>except lakes identified in 20.6.4.313 NMAC</u>, all perennial reaches of tributaries to the Mora river upstream from the USGS gaging station at La Cueva, perennial reaches of Coyote creek and its tributaries, the Cimarron river and its perennial tributaries above state highway 21 in Cimarron <u>except Eagle Nest lake</u>, all perennial reaches of tributaries to the Cimarron river north and northwest of highway 64 <u>except north and south Shuree ponds</u>, perennial reaches of Rayado creek and its tributaries above Miami lake diversion, Ocate creek and perennial reaches of its tributaries upstream of Ocate, perennial reaches of the Vermejo river upstream from Rail canyon and all other perennial reaches of tributaries to the Canadian river northwest and north of U.S. highway 64 in Colfax county unless included in other segments.

A. Designated Uses: domestic water supply, irrigation, high quality coldwater aquatic life, livestock watering, wildlife habitat, and primary contact; and public water supply on the Cimarron river upstream from Cimarron[~~, on Eagle Nest lake~~] and on perennial reaches of Rayado creek and its tributaries.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 500 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .

[20.6.4.309 NMAC - Rp 20 NMAC 6.1.2306, 10-12-00; A, 7-19-01; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[**NOTE:** The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.310 NMAC. The standards for Shuree ponds are in 20.6.4.314 NMAC and the standards for Eagle Nest lake are in 20.6.4.315 NMAC, effective 07-10-12]

<u>20.6.4.313 CANADIAN RIVER BASIN - Encantada lake, Maestas lake, Middle Fork lake of Rio de la Casa, North Fork lake of Rio de la Casa and Pacheco lake.</u>

<u>A. Designated Uses:</u> <u>high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.</u>

<u>B. Criteria:</u> <u>The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .</u>

[20.6.4.313 NMAC - N, 07-10-12]

<u>20.6.4.314 CANADIAN RIVER BASIN - Shuree ponds (north and south).</u>

<u>A. Designated Uses:</u> <u>high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering and wildlife habitat.</u>

<u>B. Criteria:</u> <u>The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 500 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .</u>

[20.6.4.314 NMAC - N, 07-10-12]

<u>20.6.4.315 CANADIAN RIVER BASIN - Eagle Nest lake.</u>

<u>A. Designated Uses:</u> <u>high quality coldwater aquatic life, irrigation, domestic water supply, primary contact, livestock watering, wildlife habitat and public water supply.</u>

<u>B. Criteria:</u> <u>The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 500 µS/cm , or less, ; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .</u>

[20.6.4.315 NMAC - N, 07-10-12]

<u>20.6.4.316 CANADIAN RIVER BASIN - Clayton lake.</u>

<u>A. Designated Uses:</u> <u>coolwater aquatic life, primary contact, livestock watering and wildlife habitat.</u>

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL , or less, , single sample 940 cfu/100 mL , or less, .
[20.6.4.316 NMAC - N, 07-10-12]

20.6.4.317 CANADIAN RIVER BASIN - Springer lake.

A. Designated Uses: coolwater aquatic life, irrigation, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.317 NMAC - N, 07-10-12]

[~~20.6.4.313~~] 20.6.4.318 - 20.6.4.400: [RESERVED]

20.6.4.410 SAN JUAN RIVER BASIN - Jackson lake.

A. Designated Uses: coolwater aquatic life, irrigation, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL , or less, , single sample 940 cfu/100 mL , or less, .
[20.6.4.410 NMAC - N, 07-10-12]

[~~20.6.4.410 - 20.6.450~~] 20.6.4.411 - 20.6.4.450: [RESERVED]

20.6.4.453 LITTLE COLORADO RIVER BASIN - Quemado lake.

A. Designated Uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.453 NMAC - N, 07-10-12]

[~~20.6.4.453~~] 20.6.4.454 - 20.6.4.500: [RESERVED]

20.6.4.505 GILA RIVER BASIN - Bill Evans lake.

A. Designated Uses: coolwater aquatic life, primary contact, livestock watering and wildlife habitat.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.505 NMAC - N, 07-10-12]

[~~20.6.4.505~~] 20.6.4.506 - 20.6.4.600: [RESERVED]

20.6.4.702 DRY CIMARRON RIVER - Perennial portions of the Dry Cimarron river below Oak creek, and perennial portions of Long canyon and Carrizozo creeks.

A. Designated Uses: [~~coldwater~~] coolwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: [~~temperature 25°C (77°F) , or less, ;~~] the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL , or less, , single sample 235 cfu/100 mL , or less, .

(2) TDS 1,200 mg/L , or less, , sulfate 600 mg/L , or less, and chloride 40 mg/L , or less, .
[20.6.4.702 NMAC - N, 05-23-05; A, 12-01-10; A, 07-10-12]